

# **Effect of Physical Activity Education by Pharmacists on Reducing The Risk of Cardiovascular Disease in Men with Obesity: Before-After Study**

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## **Abstract**

There were 27.1% of overweight and obesity in Indonesia population aged over 18 years , and elevated in higher educated community groups as well as working as employee. The study aims to analyze the effect of physical activity education by pharmacist on reducing the risk of cardiovascular disease in men with obesity, using "Pocket Activity " Education Module.

This study using before-after study conducted to 23 male employees who are obese at the University of Surabaya . Patients are educated orally using the module " Pocket Activity " which contains the role of physical activity on reducing risk of cardiovascular disease . This study will be measured on knowledge , behavior changes , and decreased risk of cardiovascular disease.

There were significant differences before and after education at the level of knowledge (  $p = 0.00$  ) , stage of change in exercise behavior (  $p = 0.00$  ) and a decreased risk of cardiovascular disease based on body mass index and lipid profile (  $2.10 \% \pm 0.01$  and  $.78 \% \pm 0.02$   $p = 0,00$  ).

Providing " Pocket Activity " Education Module can be used as an educational tool for patients who are obese in reducing risk of cardiovascular disease.

**Keywords:** Pocket Activity Education Module , knowledge , behavior change, cardiovascular disease risk .